AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

1. On page 1, please amend the title as follows:

BATTERY CHARACTERIZATION TECHNIQUE ACCOUNTING FOR OFFSET ERROR

2. Please replace paragraph [01] of the specification with the following re-written paragraph:

This application is a national stage application under 35 USC §371 (c) of PCT Application No. PCT/US2004/24163, entitled "Battery Characterization Technique," filed on July 26, 2004, which claims priority from Australian Provisional Patent Application No. 2003903839, filed Jul. 24, 2003. In addition, this application is related to: US Patent 6,227,204, entitled "Device and process for charging of rechargeable batteries of implants," filed May 14, 1999; US Patent Application 09/654,731, entitled "Transcutaneous Power Optimization Circuit for ~~a CochlearTM~~ Cochlear Implant," filed Sep. 5, 2000; US Patent Application 10/257,170, entitled "Battery Monitor and Power Demand Adjuster," filed Oct. 8, 2002; and US Patent Application 09/962,898, entitled "Multiple Battery Management System" filed Sep. 25, 2001 and US Patent Application 10/883,809, entitled "Transcutaneous Power Optimization Circuit for a ~~CochlearTM~~ Medical Implant," filed July 6, 2004. The entire disclosure and contents of the above applications are hereby incorporated by reference herein.

3. Please replace paragraph [83] of the specification with the following re-written paragraph:

Minimize processing burden, despite varying current. The interrupt routine simply increments or decrements a charge counter every few seconds (or longer) and thus requires very little processing power. This is useful ~~critical~~ in a ~~Cochlear~~™ cochlear implant, for example, where the processor has a high utilization, and all instructions are optimized.

4. Please replace paragraph [86] of the specification with the following re-written paragraph:

Turning to ~~Figures.~~ FIGS. 7 and 8, one embodiment of the present invention is a ~~Cochlear~~™ cochlear implant 40 adapted for implantation in the temporal bone adjacent the ear comprises a coil 46, microphone 42, rechargeable battery 43 and speech/stimulation processor 44 incorporated within a single integrated device 40. As may be seen, the implant 40 also utilizes a

coil 46 and a magnet 47. A housing 45 is provided to at least partially enclose rechargeable battery 43 and speech/stimulation processor 44.

5. Please replace paragraph [87] of the specification with the following re-written paragraph:

Coil 46 also acts a power receiver and so provides a means of inductively charging battery 43 through the RF link. However, implant 40 is capable of operation while battery 43 is being recharged. Further, coil 46 acts as a RF link to allow bidirectional data transfer between implant 40 and external devices. For further methods of charging, the reader is referred to U.S. patent application Ser No. 09/654,731, entitled "Transcutaneous Power Optimization Circuit for ~~a CochlearTM~~ Cochlear Implant," filed Sep. 5, 2000.

6. Please replace paragraph [88] of the specification with the following re-written paragraph:

Referring to Figure 9, the electrical architecture 50 of the ~~CochlearTM~~ cochlear implant 40 is based on a microcontroller 58 which performs the main control functions. An internal audio signal path 52 includes internal microphone 42, front end 51 and sound processor 53. The external stimulus and control data path includes an RF Link (antenna coil) 46, RF controller 54, data encoder 56, output controller 59, current generator 62, electrode switch network and output stage 61, and cochlea electrodes 63.